

**SOURCE WATER PROTECTION BRANCH
WEEKLY ACTIVITY REPORT
WEEK ENDING SEPTEMBER 25, 2015**

OKLAHOMA CORPORATION COMMISSION DENIES FIVE DISPOSAL WELL

PERMITS: For the first time, Commissioners at the Oklahoma Corporation Commission (OCC) turned down five disposal well permits due to seismicity concerns. Previously, operators agreed to additional restrictions and were given an order allowing disposal operations. This time the applications were denied. On September 18th, two M4+ earthquakes rocked the area around numerous oil tank farms at Cushing, Oklahoma. Cushing's nickname is "The Pipeline Crossroads of the World." It's one of the largest crude oil storage hubs in the world with approximately 85 million barrels of crude oil storage capacity. Two disposal wells in the area have been shut-down and three others had their rates reduced. Geologist, Robert Jackman sent Matt Skinner at OCC, an 'open email' pointing out the nature of the Arbuckle formation (lots of fractures and natural caverns), makes the orders to plug back a short distance above the basement to be ineffective. (This concern had been mentioned over a year ago in a discussion between EPA and OCC representatives.) Mr. Jackman's e-mail went on to request clarification on what limit of disposal volumes was considered to be safe. **Nancy Dorsey, 665-2294; Philip Dellinger, 665-8324**

NO COMMENTS RECEIVED FROM OKLAHOMA CORPORATION COMMISSION

ON DRAFT EPA 2014 UIC END-OF-YEAR: The Oklahoma Corporation Commission (OCC) staff reviewed the EPA underground injection control (UIC) draft End-of-Year (EOY) for 2014, prior to finalization. The Director of the Oil & Gas Division thought the report was a 'little harsh' on OCC's database program, but his staff assured him it was not. There were no comments on the seismicity portion of the report, the EOY is now circulating through e-routing. The press is awaiting the release of the EOY for ongoing reporting on induced seismicity in Oklahoma. The draft completed an extensive internal review of the report. **Nancy Dorsey, 665-2294**

REVISED TOTAL COLIFORM RULE TRAINING IN ARKANSAS: On September 24, 2015, two members of the Drinking Water section provided Revised Total Coliform Rule (RTCR) train-the-trainer training in Little Rock, Arkansas to the Arkansas Department of Health and two other technical assistance providers: Arkansas Rural Water Association (ARWA) and Arkansas Community Resource Group. The training was tailored to ADH's special primacy requirements including the state's flexibility for rule implementation. The RTCR becomes effective on April 1, 2016 and is applicable to an estimated 1100 public water systems in Arkansas. The rule establishes a maximum contaminant level (MCL) for *E. coli* and uses *E. coli* and total coliforms to initiate a "find and fix" approach to address fecal contamination that could enter into the distribution system. It requires public water systems (PWSs) to perform assessments to identify sanitary defects and subsequently take action to correct them. **Nancy Ho, 665-3179; Andy Waite, 665-7332**

SUITABILITY OF LOG DATA FROM RRC'S WISE COUNTY WATER MONITORING WELL NO. 2 FOR WATER SALINITY ESTIMATES IS SCRUTINIZED: Following its review of the Wise County Project draft report, the RRC's (Railroad Commission of Texas) Groundwater Advisory Unit provided comments on water salinity estimates methodology.

Picking up on the discussed methodology, one member of the Ground Water/UIC Section researched the suitability of the Groundwater Advisory Unit's Estepp Method for estimating water salinities at the RRC's Water Monitoring Well No. 2 using this well's composite log data, as part of efforts aimed at understanding how area drinking water wells became impacted by brine. It was determined that this log's uncharacteristic resistivity data doesn't lead to reliable water salinity estimates, a conclusion that a member of the Groundwater Advisory Unit agreed with. **José Eduardo Torres, 665-8092**

BORDER 2020 PRESENTATION ON HYDRAULIC FRACTURING DRAWS

QUESTIONS ON DISPOSAL WELLS: The Ground Water Center Coordinator made a presentation to the Border 2020 meeting in El Paso on September 22, 2015, on the findings of the Interim Report of the National Study of the Potential Impacts of Hydraulic Fracturing on Drinking Water Resources. Following the presentation, participants' questions focused on disposal operations and options, primarily disposal wells and their safety. It was acknowledged that Oklahoma officials recently made a linkage between injection wells and the tremendous increase in earthquakes in Oklahoma. However, it was also noted that induced earthquakes begin at low magnitudes and offer the opportunity to develop a response plan before major damage occurs, which Oklahoma is in the process of doing. **Michael Overbay, 665-6482**

REGION 6 REVIEWS AND PROVIDES COMMENTS ON ONE OF EPA'S NATIONAL HYDRAULIC FRACTURING OPERATIONS STUDY DRAFT REPORTS:

A member of the Ground Water/UIC Section reviewed the draft report "Review of Well Operator Files for Hydraulically Fractured Oil and Gas Production Wells: Hydraulic Fracturing Operations" by the Office of Research and Development, and provided comments and recommendations. Overall, the draft report was found to be acceptable, after R6 recommended major revisions. **José Eduardo Torres, 665-8092**

RAILROAD COMMISSION OF TEXAS ACTING EXECUTIVE DIRECTOR: Currently, Mr. Lindil C. Fowler, Jr. is serving as acting executive director of the Railroad Commission of Texas (RRC). Mr. Fowler previously served as the agency's general counsel. Commission action to fill the position permanently is unknown. Former executive director, Milton Rister, resigned effective August 31, 2015. The RRC regulates all oil and gas activity in Texas and maintains Underground Injection Control (UIC) primacy programs for both Class II and Class III brine mining injection wells. **Mike Frazier, 665-7236**

NMED FY15 END-OF-YEAR CWA 106 DISCUSSION: Members of the Ground Water/UIC Section participated in FY15 End-of-Year discussions with ground water staff of the New Mexico Environmental Department (NMED) via conference call on September 23rd. The discussions focused on NMED activities under the Clean Water Act (CWA) Section 106 Grant for Water Quality Management during the state fiscal year 2015. These efforts ensure that wastewater discharges are permitted to safeguard ground water resources. The R6 grants project officer was in Santa Fe for these discussions. **Omar Martinez, 665-8485; Lisa Pham, 665-8326, Arlene Gaines, 665-7163**